

Nano-g Micromachined Inertial Sensors with Low Payload Impact, Phase I

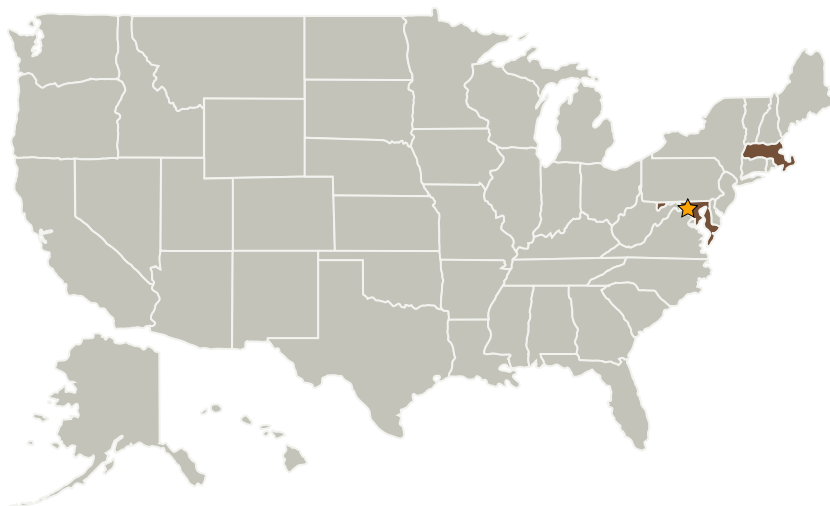
Completed Technology Project (2007 - 2007)



Project Introduction

Radiant Acoustics' patented technology for micro-interferometry enables a nano-g inertial sensor for NASA's emerging needs. The proposed sensor system is 1000x more sensitive than commercial sensors. The sensor combines silicon micromachining (i.e. MEMS) and nanotechnology-based infrared vertical cavity surface emitting lasers (VCSELs) to form a robust sensing architecture functioning in a fundamentally different way than any existing sensor systems by using an optical interferometer within a 5 mm³ package. Working prototypes have been fabricated and characterized. This Phase I proposal is to develop our proven laboratory innovation into a product for NASA and other commercial markets. All Key Personnel are Full time Employees of the company.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★ Goddard Space Flight Center (GSFC)	Lead Organization	NASA Center	Greenbelt, Maryland
Radiant Acoustics, Inc.	Supporting Organization	Industry	Wellesley, Massachusetts



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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Goddard Space Flight Center (GSFC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Primary U.S. Work Locations

Maryland

Massachusetts

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Technology Areas

Primary:

- TX13 Ground, Test, and Surface Systems
 - └ TX13.2 Test and Qualification
 - └ TX13.2.7 Test Instruments and Sensors